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APPLICATION NO.		FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.	
10/084,638	0/084,638 02/27/2002		Michael Babich	21511/92177	3698	
23644	7590	07/03/2006		EXAMINER		
		NBURG, LLP	ROONEY, NORA MAUREEN			
P.O. BOX 2786 CHICAGO, IL 60690-2786			ART UNIT	PAPER NUMBER		
				1644	1644	
			DATE MAILED: 07/03/2006			

Please find below and/or attached an Office communication concerning this application or proceeding.

## Advisory Action Before the Filing of an Appeal Brief

Application No.	Applicant(s)		
10/084,638	BABICH, MICHAEL		
Examiner	Art Unit		
Nora M. Rooney	1644		

	Nora M. Rooney	1644	
∸The MAILING DATE of this communication appe	ars on the cover sheet with the d	orrespondence add	ress -
THE REPLY FILED 12 June 2006 FAILS TO PLACE THIS APP	LICATION IN CONDITION FOR A	LLOWANCE.	•
<ol> <li>The reply was filed after a final rejection, but prior to or on this application, applicant must timely file one of the follow places the application in condition for allowance; (2) a Not a Request for Continued Examination (RCE) in compliance time periods:</li> <li>The period for reply expires 5 months from the mailing date</li> <li>The period for reply expires on: (1) the mailing date of this A no event, however, will the statutory period for reply expire to Examiner Note: If box 1 is checked, check either box (a) or (TWO MONTHS OF THE FINAL REJECTION. See MPEP 70</li> </ol>	ving replies: (1) an amendment, affitice of Appeal (with appeal fee) in one with 37 CFR 1.114. The reply must of the final rejection.  dvisory Action, or (2) the date set fortheater than SIX MONTHS from the mailing b). ONLY CHECK BOX (b) WHEN THE	idavit, or other evider compliance with 37 C ust be filed within one in the final rejection, who date of the final rejecti	nce, which FR 41.31; or (3) of the following ichever is later. In on.
Extensions of time may be obtained under 37 CFR 1.136(a). The date	on which the petition under 37 CFR 1.1	36(a) and the appropria	te extension fee
have been filed is the date for purposes of determining the period of ext under 37 CFR 1.17(a) is calculated from: (1) the expiration date of the s set forth in (b) above, if checked. Any reply received by the Office later may reduce any earned patent term adjustment. See 37 CFR 1.704(b). NOTICE OF APPEAL	hortened statutory period for reply origing than three months after the mailing da	inally set in the final Offi te of the final rejection, e	ce action; or (2) as even if timely filed,
<ol> <li>The Notice of Appeal was filed on A brief in comp filing the Notice of Appeal (37 CFR 41.37(a)), or any exter a Notice of Appeal has been filed, any reply must be filed AMENDMENTS</li> </ol>	nsion thereof (37 CFR 41.37(e)), to	avoid dismissal of th	ns of the date of e appeal. Since
<ol> <li>The proposed amendment(s) filed after a final rejection, t</li> </ol>	out prior to the date of filing a brief	will not be entered by	0001100
(a) ☐ They raise new issues that would require further cor (b) ☐ They raise the issue of new matter (see NOTE below (c) ☐ They are not deemed to place the application in bet	nsideration and/or search (see NO w);	TE below);	
appeal; and/or		- · · ·	
(d) They present additional claims without canceling a converse NOTE: (See 37 CFR 1.116 and 41.33(a)).	corresponding number of finally rej	ected claims.	•
4. The amendments are not in compliance with 37 CFR 1.12	21. See attached Notice of Non-Co	moliant Amendment	(PTOL-324)
5. Applicant's reply has overcome the following rejection(s):			(
6. Newly proposed or amended claim(s) would be all non-allowable claim(s).		timely filed amendme	ent canceling the
7.  For purposes of appeal, the proposed amendment(s): a) [how the new or amended claims would be rejected is prove The status of the claim(s) is (or will be) as follows: Claim(s) allowed: <u>none</u> . Claim(s) objected to: <u>none</u> . Claim(s) rejected: <u>17 and 22-28</u> . Claim(s) withdrawn from consideration: <u>1-16,18-21 and 28</u>	vided below or appended.	ll be entered and an e	explanation of
AFFIDAVIT OR OTHER EVIDENCE	<del>,-33</del> .		
8.  The affidavit or other evidence filed after a final action, but because applicant failed to provide a showing of good and was not earlier presented. See 37 CFR 1.116(e).	t before or on the date of filing a No d sufficient reasons why the affidav	otice of Appeal will <u>no</u> it or other evidence is	t be entered necessary and
9. The affidavit or other evidence filed after the date of filing entered because the affidavit or other evidence failed to o showing a good and sufficient reasons why it is necessary	vercome <u>all</u> rejections under appear and was not earlier presented. S	al and/or appellant fai ee 37 CFR 41.33(d)(1	ls to provide a l).
10. The affidavit or other evidence is entered. An explanation	n of the status of the claims after e	ntry is below or attach	ned.
REQUEST FOR RECONSIDERATION/OTHER  11. The request for reconsideration has been considered but See Continuation Sheet.	t does NOT place the application in	n condition for allowar	nce because:
12. Note the attached Information Disclosure Statement(s). (	PTO/SB/08 or PTO-1449) Paper N	lo(s)	
13.  Other:			
•			
		, •	

Continuation of 11. does NOT place the application in condition for allowance because:

- 1. Claims 17 and 22-28 stand rejected under 35 U.S.C. 102(b) as being anticipated by US Patent 5,583,046 (Reference A1 of the IDS submitted 12-9-02), as evidenced by Vrtala et al. (Reference AR on the IDS of 8-6-02) for the same reasons set forth in the previous Office Action mailed 1-11-06.
- 2. Applicant's arguments filed 06-12-06 have been fully considered but are not found persuasive.
- 3. Applicant argues that a 35 U.S.C. 102 rejection is improper because all of the steps recited in claim 17 are not taught by the '046 patent and using the Vrtala reference is improper to cure the deficiencies.
- 4. Claim 17 requires an in vivo diagnostic test comprising administering a multimeric profilin molecule. The '046 patent teaches administering Bet v2, a profilin. The reference is silent as to whether said Bet v2 is multimeric. Vrtala recognized that when rBet v2 is placed in solution it naturally polymerizes. The Vrtala reference is only relied upon as an evidentiary reference.
- 5. By applicants own admission page 10 of the specification, biochemical data and computer-based modeling show that profilin can form multimers and that the multimers remain strongly attached due to strong chemical bonds. Applicant also admits that "the chemical free energy (favorable state) for two profiling molecules is to self associate." The chemical free energy state is an inherent property of the molecule. When Bet v2 is placed in solution, as required to administer to a subject in non-lyophilized form, it polymerizes due to the physical properties of the molecule. The Vrtala reference teaches on page 914 "it could be shown that rBet v2 formed polymers through disulfide bonds" and that "The tendency of recombinant Bet v 2 to form polymers through disulfide bonds under non-reducing conditions was demonstrated by SDS-PAGE, immunoblotting and blot overlays." This reference has been used simply to illustrate an already described process showing inherent properties of the molecule.
- Applicant puts forth on page 10 of the specification that "The ability of plant profilin to form clinically relevant multimers from human and a variety of plant species is a novel aspect of the present invention. However, applicant admits on page 11 of the specification that "established methods of profilin isolation have often yielded extraneous and unidentified proteins (discussed in Babich, et al., 1996) that are <sup>3</sup> 2 times the recognized size of the 12-15 kDa cytoskeletal molecule." The court in Atlas Powder Co. V. IRECO, 51 USPQ2d 1943 (Fed. Cir. 1999) held that "Artisans of ordinary skill may not recognize the inherent characteristics or functioning of the prior art... However, the discovery of a previously unappreciated property of a prior art composition, or of a scientific explanation for the prior art's functioning, does not render the old composition patentably new to the discoverer. " The prior art shows inherent characteristics of profilin that may have been unappreciated, but are nonetheless inherent properties of the molecule and are not patentably distinct.
- 7. Applicant argues that Vrtala teaches away from the claimed invention. However, the reference is being relied on to show inherent properties of the profilin Bet v2 molecule, not observations of the level of allergenicity of the profilin.
- 8. Applicant's argument that the form of rBet v2 injected into the animal models was likely monomeric is without merit. On page 914 in the Vrtala Methods section relied upon by applicant for this assertion, "the recombinant protein produced a single peak in the chromatogram" is referring to the rBet v1 protein, not the rBet v2 protein.
- 9. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Nora M. Rooney whose telephone number is (571) 272-9937. The examiner can normally be reached Monday through Friday from 8:30 am to 5:00 pm. A message may be left on the examiner's voice mail service. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Christina Chan can be reached on (571) 272-0841.
- 10. The fax number for the organization where this application or proceeding is assigned is (571) 273-8300.
- 11. Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at (866) 217-9197 (toll-free).

Nora M. Rooney, M.S., J.D. Patent Examiner Technology Center 1600 June 29, 2006

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